## REMARKS

Claims 1-20 are all the claims that are pending in the application. By this Amendment, new claims 17-20 are added.

Claims 1, 2, 8, 9, 13 and 14 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Enoki (U.S. Patent No. 6,014,571; hereinafter "Enoki"). Claims 3-7, 10-12, 15 and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicant submits the following in traversal of the claim rejections.

Applicant respectfully submits that claim 1 is patentable because a *prima facie* case of obviousness has not been established. Claim 1 recites:

> A radio signal parallel processing apparatus which receives and processes in parallel a first carrier signal of a frequency ω1 and a second carrier signal of a frequency ω2 (ω2 > ω1), the apparatus comprising:
>
> a first local oscillator which outputs a signal of a frequency ω as an output signal of the first local oscillator;
>
> a first frequency mixer which receives the first carrier signal and the signal of the frequency ω, and frequency converts the first carrier signal into a first signal of a first intermediate frequency (ω - ω1) and a first signal of another first intermediate frequency (ω + ω1), and outputs the first signals of the first intermediate frequencies (ω - ω1) and (ω + ω1) as output signals of the first frequency mixer; and

a second frequency mixer which receives the second carrier signal and the signal of the frequency ω, and frequency converts the second carrier signal into a second signal of a first intermediate frequency (ω2 - ω) and a second signal of another first intermediate frequency (ω2 + ω) and outputs the second signals of the first intermediate frequencies (ω2 - ω) and (2ω + ω) (ω2 + ω) as output signals of the second frequency mixer.

(Emphasis added).

In the Office Action, the Examiner states that he "is taking the language 'in parallel' to be construed as the parallel pictorial architecture of the two received carrier's paths." Page 3. Figure 1 of Enoki, however, does not show a "parallel pictorial architecture of the two received carrier's paths." Enoki discloses a receiving mode switching signal generation circuit 35 which selectively supplies power to one of the i) amplifier 5 and the mixer 9 and the ii) amplifier 6 and the mixer 10 so that only one signal output from the receiving circuit 101a and the receiving circuit 101b is output to the variable gain amplifier 14. Therefore, Enoki cannot possibly disclose a radio signal parallel processing apparatus which receives and processes in parallel a first carrier signal of a frequency ω1 and a second carrier signal of a frequency ω2 (ω2 > ω1), as recited in claim 1.

Further, Applicant would argue that it would not have been obvious for one skilled in the art to modify the teachings of Enoki so that the first LO output signal 103 and the second LO output signal 104 are the same. Claim 1 recites a first local oscillator which outputs a signal of a frequency ω which is received by the first frequency mixer and the second frequency mixer. Although Enoki discloses a single LO 13, the LO 13 generates the local oscillation signal for the

two different and entirely separate processes for signals received from the receiving circuits 101a and 101b, as explained above. In other words, because Enoki discloses the selective serial processing of one of the signals from the receiving circuits 101a and 101b, there is no motivation for one skilled in the art to have the LO 13 generate the same local oscillation signal to the receiving circuit 101a and 101b.

For at least the above reasons, claim 1 is patentable.

For reasons similar to those submitted for claim 1, claim 8 is patentable. For example, there is nothing in Enoki which teaches, suggests or provides motivation for generating a first signal of a first intermediate frequency ($\omega - \omega 1$) and a first signal of another first intermediate frequency ($\omega + \omega 1$) by frequency converting the first carrier signal; and generating a second signal of a first intermediate frequency ($\omega 2 - \omega$) and a second signal of another first intermediate frequency ($\omega 2 + \omega$) by frequency converting the second carrier signal. As explained above, there is nothing in Enoki which suggests having a common local oscillation signal for the first signal and the second signal. Thus, claim 8 is patentable.

For reasons submitted for claims 1 and 8, claim 13 is patentable.

Claims 2, 9 and 14, which depend from claims 1, 8 and 13, respectively, are patentable for at least the reasons submitted for their respective base claims.

In addition, claim 2 is patentable because Enoki fails to teach, suggest or provide motivation for an apparatus wherein the frequency $\omega$ of the output signal of the first local oscillator is substantially equal to $(\omega 2 + \omega 1)/2$, which is an average frequency of the frequency $\omega 1$ and the frequency $\omega 2$. As explained above, Enoki discloses having the selective serial processing of one of the signals from the receiving circuits 101a and 101b. Because the two

signals are independently processed by the selection of the receiving mode switching signal generation circuit 35, there is no motivation for one skilled in the art to modify the teachings of Enoki so that the first and the second LO output signals 103 and 104 are the same.

Similarly, claims 9 and 14 are patentable for at least the reasons submitted for claim 2.

Lastly, new claims 17-20 are added to more fully claim the invention.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

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Respectfully submitted,

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